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On May 9, 1914, a cluster of about fifty plants was found three miles west of Bloomington, Ind. These plants were all within an area of four square yards, at the edge of a bush patch on a northwesterly slope near the low and somewhat marshy soil bordering a natural drain. The soil was a stiff clay covered with a very light layer of humus and dead leaves. The plants were from 6 cm. to 10 cm. high, but with the spores not quite mature. About a week after making the above find, on May 14 to be exact, I was tramping with Prof. D. M. Mottier, of Indiana University, over the rough limestone country about 5 miles northwest of Harrodsburg, Ind., when we found another group of O. vulgatum. This group showed as many plants as the first, but more closely placed, and somewhat larger than the others. There were no mature spores. This group was on top of a considerable hill, with quite dry soil and a shading of beech and sugar maple. Many of the plants were growing in a path which had recently fallen into disuse. F. L. PICKETT.

Note upon Polypodium subtile and a related

## species<sup>1</sup>

#### WILLIAM R. MAXON

Polypodium subtile Kunze, described in  $1847^2$  from Merida, Colombia, upon specimens collected by Moritz (no. 325), is a diminutive outlying member of the group of *P. cultratum* Willd. which has been rather widely but not frequently collected, the range ascribed to it by Christensen being "Jamaica, Venezuela-Peru." The Jamaican record is erroneous and comes from including

<sup>1</sup> Published by permission of the Secretary of the Smithsonian Institution.

<sup>2</sup> Linnaea 20: 375.

### NOTE ON POLYPODIUM

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in the concept of this species a closely related but very distinct plant described from the high mountains of Jamaica, nearly forty years ago, as Polypodium albopunctatum Baker,<sup>3</sup> and apparently confined to that region. Baker's name being invalidated by Polypodium albopunctatum Raddi,<sup>4</sup> applied to a Brazilian plant of the Goniophlebium group, the new name Polypodium cretatum is here proposed for the Jamaican species, in allusion to the thin chalk-like scales which overlie the hydathodes on the upper surface of the leaf segments. Of Polypodium cretatum the following specimens, all Jamaican, are in the National Herbarium: Upper slopes and summit of Sir John's Peak, Underwood 3181, 3187, 3199, 3203; slopes of Monkey Hill (above New Haven Gap), alt. 1800 meters, Maxon 2702, 2754; near Mabess River, alt. 900 meters, Maxon 1570; without special locality, Hart 71. These agree essentially with Baker's original description, also with Jenman's redescription<sup>5</sup> of P. albopunctatum Baker.

Polypodium subtile Kunze is known to the writer from several fragments of the type collection (Moritz 325) in the Underwood herbarium and from two additional collections, both of which agree with the type. The first is a Colombian plant (Lehmann 7381), cited as P. subtile by Hieronymus;<sup>6</sup> the other consists of excellent Guatemalan specimens collected by von Tuerckheim (J. D. Smith 964), distributed as P. albopunctatum Baker. From these it is seen that P. subtile differs rather noticeably from P. cretatum, (1) in its copiously long-pilose fronds, the hairs stramineous to pale reddish, 1.5 to 2.5 mm. long (not stiff, reddish brown, averaging 1 mm. long); and (2) in its few, rather large basal segments, these abruptly discontinuous (not gradually

<sup>3</sup> Journ. Bot. Brit. & For. 15: 265. 1877. <sup>4</sup> Opusc. Sci. Bol. 3: 287. 1819. <sup>5</sup> Bull. Bot. Dept. Jamaica II. 4: 116. 1897. <sup>6</sup> Bot. Jahrb. Engler 24: 506. 1905.

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smaller, long-decurrent, and finally evident as slight alar prominences). The rhizome scales are similarly fuscous, but those of P. subtile are shorter, relatively broader, and more persistently ciliate. The thin, peltate, flake-like, cretaceous scales, overlying the hydathodes singly, are characteristic of both species.

Some experiences in fern-hunting near

# Philadelphia

#### GEORGE REDLES

(As narrated at the Fern Society meeting, Dec. 28, 1914)

It was with some misgivings that I complied with Mr. Scott's order to address you, and I think the best thing I can do will be to relate some of my experiences. Mr. Joseph Meehan claimed that Aspidium Goldieanum, as figured in Meehan's Monthly, was too narrow in outline and did not agree with any specimen's that he had seen. As he, Edwin Jellett, and myself took botanical trips together, we were very anxious to find some of this species in our rambles. As we had canvassed most of the locality within twenty miles without results, we began to despair of ever finding it, though Prof. Meehan claimed the specimen figured had been collected in the Wissahickon. One Sunday, after a most delightful trip along Edge Hill to the Pennypack, Joseph remarked: "Wouldn't it be a grand ending to a perfect day to find some Goldieanum?", and, while drinking from a spring which ran down along a gentle slope, I noticed a number of extra large ferns growing in the water among stones and proceeded to investigate. On picking a frond and looking for the spore-cases, I found them to be very close to the mid-vein and on my showing it to Joseph, he let out a "Hurrah!" and said: "We have found it